(February 11, 2009) Supporting Engineers Week

Floor Statement - H.Res. 117

Supporting the goals and ideals of the National Engineers Week

Congressman Dan Lipinski

February 11, 2009

I rise today in support of H. Res. 117, supporting the goals and ideals of the National Engineers Week.

As an engineer, I am proud to sponsor this resolution again honoring National Engineers Week, and I would like to thank the gentleman from Michigan (Mr. Ehlers) for working with me on this resolution and on so many other important issues. Mr. Ehlers and I are the co-chairs of the STEM Ed, the Science, Technology, Engineering and Math Caucus. STEM Ed is really critical to the future of our country and the future of American technology and leadership in the world. And promoting STEM Ed, especially in engineering, is a big part of what National Engineers Week is all about.

I want to begin by sharing a few statistics: Three hours, 44 percent, and 45,000 teachers. Three hours is the average amount of weekly science instruction currently received by early elementary school students in the United States, 3 hours; 44 percent of districts cut the time devoted to elementary science education since the enactment of No Child Left Behind; and, at the end of 2000, the last year that we have good statistics for, 45,000 math and science teachers left the teaching profession.

Couple these statistics with the projection that, by 2012, about 46 percent of all engineering jobs could become vacant due to retirement by the aging workforce, and it becomes clear we need a renewed emphasis on educating and exciting America's youth about engineering and science.

Next week is the 18th annual Engineers Week, a week which features events aimed at educating youth and fostering public awareness about the vital contributions made by engineers to our quality of life and our economic prosperity. Through programs like the Future City Competition, Introduce a Girl to Engineering Day, and the first robotics competition, the National Engineers Week Foundation confronts the challenge of plugging the leaky pipeline and encouraging more students to pursue careers in engineering. We lose far too many students through this leaky pipeline, and we are not producing enough engineers right now through our educational system.

Engineers Week comprises numerous events. For example, students learn the value of teamwork as they work in groups to develop creative and practical solutions to some of the most important problems facing our world. Projects like designing future cities make engineering come alive for students, planting a seed that can lead to further studies or a career in engineering. Indeed, research shows that children's early experiences with science and engineering are a

stronger prediction of long-lasting interest in science fields than aptitude tests.

I can attest that my own childhood experiences with science and engineering captivated me. As a child growing up in Chicago, I was fascinated with figuring out how mechanical devices worked. I remember that my high school calculus and physics teachers at St. Ignatius, Father Thul and Father Fergus, were the ones who helped mold this childhood fascination into an interest in engineering.

As a child, I also remember going to the Museum of Science and Industry. I remember touring the coal mine exhibit. I remember seeing the enormous train set teaching about trains and setting out the tracks and about how locomotives work. I remember all the exhibits there, and how much that excited and captivated me. And all these experiences instilled in me the knowledge, confidence, and intellectual curiosity needed to pursue an undergraduate degree in mechanical engineering at Northwestern University and then a master's degree in engineering from Stanford. One of the central goals of National Engineers Week is to provide this kind of inspiration for the next generation of students.

Engineers have played a critical role throughout our history, and there are numerous challenges facing our world that require immediate engineering solutions, including developing American energy independence, finding solutions to confront global climate change, and making our Nation more secure. We need to make sure that our country remains capable of designing, planning, and building these projects. We need to help grow the next generation of talent by removing the social, educational, and economic barriers that deter young students from careers in engineering and technology. Now more than ever we need to recognize the many contributions that engineers have made to our country and the role that they must continue to play if we are to remain competitive in an increasingly connected global economy.

Mr. Speaker, I would like to again thank the gentleman from Michigan (Mr. Ehlers), I would like to thank Ranking Member Hall, as well as the 37 other cosponsors of H. Res. 117. I would like to especially thank the engineers who have contributed so much to America. I urge my colleagues to pass this resolution.